**Question 3.** Describe the scope and extent of the addition of the overfire air systems to Units 1 & 2 at the facility including:

- a) a description of new overfire air ports that were installed;
- b) the location of new overfire air ports relative to the existing burners;
- c) any necessary modifications made to the existing burners due to the overfire air system;
- d) the scope of any increased total intake air;
- e) the design percentage of the total combustion air diverted to the overfire air ports; and
- f) any monitoring equipment installed for operation of the overfire air system.

## Response:

Much of the information about the overfire air (OFA) system responsive to this question is in the Babcock Borsig Power, Inc "Operation and Maintenance Manual" ("O&M Manual") (Bates Number IP7\_033105 to IP7\_033283) produced in response to Question 7 of the September 28, 2010 Section 114 Request. References to the O&M Manual in this response to Question 3 include the Bates number(s) where the specific information can be found.

Response to "a) a description of new overfire air ports that were installed":

O&M Manual, pp. 1 to 3 (Bates Nos. IP7\_033120 to IP7\_033123).

O&M Manual, Introduction drawings (Bates Nos. IP7\_033106 to IP7\_033109).

Response to "b) the location of the new overfire air ports that were installed":

O&M Manual, p. 1 (Bates No. IP7\_033120).

O&M Manual, Introduction drawings (Bates Nos. IP7\_033106 to IP7\_033109).

O&M Manual, Appendix A, drawings (Bates Nos. IP7\_033264 to IP7\_033283).

Response to "c) any necessary modifications made to the existing burners due to the overfire air system":

There were no modifications made to the existing burners due to the overfire air system.

Response to "d) the scope of any increased total intake air":

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EPA Request dated August 17, 2011, for information pursuant to Section 114. Response 3 of 24 of Appendix C.

Total intake air is not increased; rather approximately 15% of the total combustion air is diverted from the main burner zone and introduced above the top elevation of burners through the overfire air ports.

OFA O&M Manual p. 1 Introduction (Bates No. IP7\_033120).

O&M Manual pp. 2-3, (Bates Nos. IP7\_033122 to IP7\_033123).

Response to "e) the design percentage of the total combustion air diverted to the overfire air ports":

O&M Manual, pp. 3-4 (Bates Nos. IP7\_033122 to IP7\_033123).

Response to "f) any monitoring equipment installed for operation of the overfire air system":

Air Monitor, Combustion Airflow Management System (CAMS).

O&M Manual, pp. 3-4 (Bates Nos. IP7\_033122 to IP7\_033123).

DCAMS "Installation, Operation, and Maintenance Manual", pp. 1-64, found in O&M Manual (Bates Nos. IP7\_033147 to IP7\_033215).

This response was prepared by IPSC employee Dean E. Wood.